REMARKS/ARGUMENTS

Claims 1, 5-9, 19, 20 and 32-38 are active.

SUPPORT FOR THE AMENDMENT

Independent Claims 1 and 32 have been amended to indicate that the medicine storage layer consists of the medicine(s) or the medicine(s) and a vehicle. Support for this amendment is found in the specification, Examples 1, 2, 4 and 5, where the medicine storage layer consists of a medicine and in Examples 3 and 6, where it consists of a medicine and a vehicle. Page 5, lines 2-12, of the specification also describes vehicles. Accordingly, the Applicants do not believe that any new matter has been added.

Rejection—35 U.S.C. §103(a)

Claims 1, 4-9, 19, 20 and 32-38 were rejected under 35 U.S.C. 103(a) as being unpatentable over Pfister et al., U.S. Patent No. 5,232,702, in view of Mantelle, U.S. Patent No. 5,446,070 and further in view of Wick et al., U.S. Patent No. 5,662,926. The Applicants submit that the cited prior art does not disclose or suggest the invention for the following reasons.

The Applicants reiterate their prior arguments with respect to Pfister et al., which does not disclose or suggest a solid medicine storage layer in combination with a permeation controlling film. As noted in the rejection, Pfister is directed to a device with a liquid reservoir. Such a liquid reservoir is quite distinct from the solid medicine storage layer of the invention. Accordingly, even were one with ordinary skill in the art motivated to incorporate the medicines of Mantelle into the liquid reservoir of Pfister and with the adhesives of Wick et al., this would not result in the present invention having a solid reservoir with a permeation controlling film which when activated by moisture, allows a medicine to permeate, dissolve,

disperse or diffuse through the permeation controlling film into the skin. This solid reservoir, as shown in the Examples in the specification and in the attached Declaration, is an important feature of the invention that allows a medicine to be stored in a more stable form by restraining its degradation or decomposition.

The Examiner agrees on page 5 of the Official Action that Pfister does not teach a medicine storage layer comprising one or more medicines that permeate, dissolve, disperse, or diffuse into a plasticized permeation controlling film which has been activated by moisture. However, page 6 of the Official Action expresses concern that the liquid reservoir of Pfister is "similar in means and effect of the medicine storage layer and serves and identical purposes as that of the medicine storage layer".

To dispel this concern, the Applicants point out that the present invention provides a percutaneous absorption preparation, which, even when a medicine is an unstable compound in a polymer such as an adhesive and poly(vinyl alcohol), serves to stabilize the medicine by restraining is decomposition and deterioration during preservation, and which subsequently allows the medicine to move to the layer of adhesive and to the skin for absorption at the time of application, see the specification, page 2, lines 5-13 and Test Examples 1 and 2.

Incorporation of a medicine into an adhesive or into a medicine storage layer comprising a polymer such as poly(vinyl alcohol) can reduce its stability and result in degradation of the medicine over time. Comparative Examples 1-3 shown that incorporation of the medicine into an adhesive resulted in degradation of the medicine over time compared to Examples 1-6 where a solid medicine storage layer was used, see Table 2 on page 13 and compare Examples 4 and 5 with Comparative Examples 2 and 3; and compare Examples 1-3 and 6 with Comparative Example 1. Moreover, as shown in the attached Declaration of Mr. Kaname Nakahara, when the medicine nicorandil is contained in a polymer, such as poly(vinyl alcohol), the stability of the medicine lowers. As shown by the above data, the

constitution of the medicine storage layer exerts a significant influence on the stability of a medicine. Accordingly, in view of the lack of disclosure or suggestion in the cited prior art for producing a solid medicine storage layer in combination with a permeation controlling film, and in view of the demonstrated superior medicine stability in products containing a solid medicine storage layer, the Applicants respectfully submit that this rejection may now be withdrawn.

CONCLUSION

In view of the above amendments and remarks, the Applicants respectfully submit that this application is now in condition for allowance. Early notification to that effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Norman F. Oblon
Attorney of Record
Registration No. 24,618

Thomas M. Cunningham
Registration No. 45,394

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/03)
TMC/bu

IN THE UNITED STATES PATENT AND

TRADEMARK OFFICE

In re PATENT APPLICATION of

KANAME NAKAHARA et al.

Atty. Docket No.: 216208US0XPCT

Serial No. 09/762,615

Group Art Unit: 1615

Filed: February 8, 2001

Examiner: SHEIKH, HUMERA N

For: A MOISTURE-SENSITIVE PERCUTANEOUS ABSORPTION PREPARATION

DECLARATION PURSUANT TO 37 C.F.R.1.132

1. I, Kaname Nakahara, do hereby declare as follows:

I graduated from Tohoku University in March, 1997. Since April, 1997, I have been employed by Lintec Corporation.

I have a full knowledge of the present invention and cited references.

2. In order to demonstrate the patentability of the present invention, the following experiment was carried out.

Stability of nicorandil in poly(vinyl alcohol)

Nicorandil was compounded in poly(vinyl alcohol) so as for the content of nicorandil to become 10 % by weight. A poly(vinyl alcohol) film containing nicorandil was prepared so as for the weight of the film per square meter to become 20 g/m^2. This film was wrapped in a packing material of aluminum and preserved for one month in a constant temperature bath of 40 °C (humidity 75 %).

Then the amount of the residual medicine in the film was determined with a HPLC. The result is shown in Table 1.

Table 1

	Ratio of residual medicine (n=3)	
	mean	standard error
Directly after production	100	0.261133
After 1 month	51.89	1.076952

The result shown in Table 1 demonstrates that, when a medicine such as nicorandil contacts such a polymer as poly(vinyl alcohol), the stability of the medicine lowers..

3. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: This 15th day of October, 2003

Kaname Nakahara

Kaname Nakahara